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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,372	09/08/2003	Bernard Massie	10890-1C	8255

25277 7590 10/12/2006

NATIONAL RESEARCH COUNCIL OF CANADA  
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CANADA

EXAMINER

GROSS, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/656,372

Applicant(s)

MASSIE ET AL.

Examiner

Christopher M. Gross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Responsive to communications entered 6/8/2006. Claims 1-20 are pending. Claims 2-20 are withdrawn. Claim 1 is examined herein.

#### ***Priority***

This application is a DIV of application 09/843,949 filed 4/30/2001 (now PAT 6,642,052)

#### ***Claim Objections***

1. Claims 2-20 are dependent on a non-existent claims and are hereby withdrawn from consideration.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by anticipated by Massie et al (US Patent 6,291,226)

The applied reference has two common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The claimed invention is drawn to an adenoviral expression library comprising a plurality of recombinant adenoviruses, each recombinant adenovirus being deleted for an essential gene of a late transcriptional region of adenoviral genome and having the essential gene expressibly cloned in a second transcriptional region of adenoviral genome, each recombinant adenovirus further comprising an expressible piece of exogenous DNA.

Massie, et al, throughout the publication and especially tables 3 and 4, teach various adenoviruses deleted for protease including the variants Ad2ts1, Ad5-deltaPS and Ad5CMVLacZ-CMGFP-deltaPS. Since a library may have as few as two members, the species disclosed by Massie et al reads on a library comprising a plurality of recombinant adenoviruses, each recombinant adenovirus being deleted for an essential gene of a late transcriptional region (LTR) of adenoviral genome as set forth in claim 1. The LTR essential gene of Massie is the adenovirus protease.

Massie et al teach in column 13 and 14 transforming 293-PS cell lines with said protease defective adenoviruses. The 293-PS cell lines of Massie complement the loss of protease function of the Ad2ts1, Ad5-deltaPS and Ad5CMVLacZ-CMGFP-deltaPS species *in trans* and reads on the essential gene expressibly cloned in a second transcriptional region of adenoviral genome.

Massie et al teach in figure 5 the expression of adenoviruses comprising an exogenous piece of DNA, reading on "recombinant adenovirus further comprising an expressible piece of exogenous DNA" of claim 1.

### ***Conclusion***

Claim 1 is not allowed

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Oualikene et al (2000 Human Gene Therapy 11:1134-1353).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Gross whose telephone number is (571)272-4446. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras can be reached on 571 272-4517. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

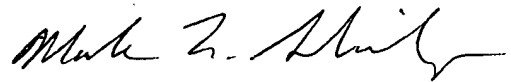
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Christopher M Gross  
Examiner  
Art Unit 1639

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A handwritten signature in black ink, appearing to read "Mark Z. Shibuya", with a stylized flourish at the end.

MARK SHIBUYA, PH.D.  
PATENT EXAMINER